

**DELTA PROTECTION COMMISSION**

14215 RIVER ROAD

P.O. BOX 530

WALNUT GROVE, CA 95690

Phone (916) 776-2290

FAX (916) 776-2293

E-Mail: dpc@citlink.net Home Page: www.delta.ca.gov

**Agenda Item #10**

January 14, 2000

To: Delta Protection Commission

From: Margit Aramburu, Executive Director

Subject: Proposed North Delta National Wildlife Refuge Project Review  
*(For Commission Consideration and Possible Action)*

---

**Staff Recommendation:**

The Commission should receive the Service's presentation on the proposed refuge, accept public comment, and determine if the proposed refuge is consistent with the Commission's Plan (see page 12) and comments on CALFED's environmental document (see page 15). The Commission should direct staff to prepare comments on the Environmental Assessment (EA).

The staff report includes: description of the proposed refuge; issues raised in earlier reviews; copies of previously submitted letters from the Commission; minutes from the July 1999 meeting; excerpts from the Plan; and comments to CALFED.

The Service is seeking input on whether a new refuge should be approved, and if yes, which of the five alternative boundaries should be selected. After reviewing the EA, the Service will determine if there will be any significant environmental impact; if yes, further analysis may be warranted.

---

**PROPOSED PROJECT:** The proposed project is the adoption of a boundary for a new national wildlife refuge. The preferred alternative (#5) would include 47,500 acres of agricultural lands, duck clubs, and tidally-influenced open water, wetlands, and riparian habitat (see attached map of the five alternatives).

The project would convert 17,500 acres of cropland and 4,500 acres of "other" land to 4,500 acres of shallow open water, 1,000 acres of deep open water, 9,500 acres of seasonal wetland, 3,500 acres of tule marsh, 2,000 acres of grassland, and 1,500 acres of oak woodland and riparian shrub/scrub forest. The levees within the Bypass would be removed to open the lower elevation

area to tidal action. The levees along Liberty Farms and Prospect Island would be breached to allow tidal action.

The final, total habitat acreages would be 5,500 acres of shallow open water, 3,000 acres of deep open water, 6,000 acres of tule marsh, 12,500 acres of seasonal wetland, 12,500 acres of grassland, 6,000 acres of cropland and 2,000 acres of oak woodland/riparian shrub/scrub forest.

The Fish and Wildlife Service states any selected alternative would include the following elements:

- Importance of Flood Conveyance in the Yolo Bypass: Any habitat restoration project for the proposed refuge will not decrease the flood conveyance capacity of the Yolo Bypass.
- Continued Agricultural Practices: The Service will pursue wildlife-friendly farming and grazing as habitat management tools on portions of the refuge. On prime agricultural lands in Yolo County, FWS would seek agricultural easements from willing landowners to maintain lands in agricultural production and promote cropping patterns that benefit fish and wildlife.
- Water Management Practices: The Service will not attempt to transfer water out of the refuge project area or reduce water availability for others in the study area through refuge restoration and management practices. However, the Service may seek to transfer water purchased from willing sellers to support management activities within the refuge boundary. Water consumption for certain types of wetlands may be higher on a per acre basis than for a comparable acreage of irrigated pasture or cropland. However, the Service will ensure through site-specific restoration planning and hydrologic analysis that refuge management activities will not lead to a decrease in water availability for landowners in the region.
- Water Diversion Screening and Protected Species: Establishment of the proposed refuge will not result in the imposition of additional regulatory restrictions (e.g. fish screens) on existing land and water practices of adjacent private landowners. The Service commits that habitat improvement projects on the proposed refuge will not adversely affect on-going land uses in the area. If necessary, the Service is prepared to cooperatively pursue the required funding for screening of surface diversions to address any potential conflicts between water use and special status fish populations.
- Safe Harbor Agreements and Protected Species: Safe Harbor agreements are available for landowners adjoining the refuge. Establishing the refuge will not automatically include development of Safe Harbor agreements, however, private landowners within or adjacent to an approved refuge boundary are able to pursue enrollment in the Safe Harbor program.
- Special Service District Costs: The Service will ensure that any remaining district members do not incur increased costs as a result of Service land acquisition and habitat improvement projects. Cooperative agreements may be necessary to ensure that the Service provides a

proportionate share of fees for any continued services that the refuge may receive. If lands within a reclamation district are planned for potential wetland restoration, the Service would ensure that remaining district members are protected, possibly through construction of new levees, from any adverse hydrologic effects.

- Comprehensive Conservation Plan: As required under federal law, a detailed 15-year plan would be developed to guide long-term management of the refuge. As part of the public planning process, the Service would determine what public uses would be compatible with the refuge purpose.
- Public Use and Recreational Boating: The refuge would provide wildlife-dependent recreational opportunities that are compatible with the refuge purpose and mission of the refuge system, such as hunting, fishing, wildlife viewing and photography, and environmental education and interpretation. Service would develop a public use plan during the Comprehensive Conservation Planning process. The Conceptual Management Plan (Appendix B) and interim compatibility determinations would guide interim public use. Prior to acquiring any lands, the Service would complete interim pre-acquisition compatibility determinations for wildlife-dependent recreational activities that could be allowed to continue until the CCP is complete. Open trails, driving tours, and other unsupervised access would not be permitted until infrastructure improvements were built. The EA assumes that 40% of the fee title acreage would be open for public recreation use. Only land acquired in fee title or managed under cooperative management agreement could be open to public use. Regulations regarding boating restrictions would depend on the nature of Service ownership and might require promulgation by State authorities, the Corps, or the Coast Guard. The Service would assimilate any new boating regulations as refuge regulations to be enforceable by refuge law enforcement personnel in cooperation with other relevant law enforcement agencies. Present boating use of existing navigable waterways would not be affected. However, some restrictions on recreational boating would likely be required for navigable areas within newly restored wetland areas to meet the goal of protecting wintering migratory water birds. Restrictions could include speed limits, seasonal closures, boat-free sanctuary areas, or limitation of use to electric motors.
- Pest Management: The Service would amend an existing cooperative agreement with the Sacramento-Yolo Vector Control District to include the new refuge. The Service would seek a similar agreement with the Solano County Mosquito Abatement District. Noxious weeds, officially listed as requiring eradication, would be controlled.
- Law Enforcement: Law enforcement would enforce the regulations protecting refuge visitors, fish and wildlife, vegetation, facilities, and cultural resources.
- Willing Seller Policy, Land Protection Options, and Revenue Sharing: Lands will be acquired on a willing seller basis, based on an appraisal of fair market value. The Service has no authority to acquire land in fee title or negotiate on behalf of the refuge system except within

an approved refuge boundary. Management of lands as part of the refuge system begins when a refuge boundary has been approved and a property owner has willingly expressed an interest in working with the Service. The Land Protection Plan (Appendix A) describes the Service policies on acquisition and management. Lands owned by other federal agencies could be transferred to the Service. Lands owned by Yolo County or the City of Davis could be jointly managed as part of the Refuge through cooperative agreements. Required payments to Counties under the Refuge Revenue Sharing Act would be made for all lands acquired in fee title.

STATUS OF THE PROPOSED PROJECT: Based on the analysis in the EA, the Regional Director of Region 1 and the Manager of the California/Nevada Operations will determine if the Service should establish the refuge; if yes, select a refuge boundary, determine the relative feasibility of habitat restoration within the Yolo Bypass based on the refuge management scenarios presented in the EA, and determine whether the selected alternative would have a significant impact upon the quality of the human environment.

PROJECT LOCATION: The project is located in the Yolo Bypass and west of the Yolo Bypass, in Yolo and Solano Counties. Most of the project is in the Primary Zone of the Delta. Alt. 5 includes Reclamation Districts 1667 (Prospect Island), 2084 (Lower Egbert), and 2093 (Liberty Island), and portions of Reclamation District 2098. Alt 5 is bounded to the east by the Toe Drain, the Sacramento Deepwater Ship Channel, and Prospect Slough, and to the southwest by Haas, Cache, and Lindsey Sloughs.

The surrounding lands are largely in private ownership in agricultural use. The Port of Sacramento owns the Sacramento Deepwater Ship Channel, built in 1963. The Port also owns a parcel on Prospect Island. The Yolo Bypass Wildlife Area is owned by the Department of Fish and Game (DFG) and is used for wildlife habitat within the Yolo Bypass. DFG also owns a small parcel on Prospect Island. In the northeast corner of the study area are a County Park and a federal antennae farm. The Cache Slough Mitigation Site (176 acres) located at the southern tip of Liberty Farms is owned by the State.

HISTORY OF OWNERSHIP: Within the preferred alternative, lands have been in private ownership since reclamation started in the late 1800's. The Reclamation District for Upper Egbert Tract and Ryer Island were formed in the late 1800's. The Districts for Hastings Tract, Yolano (2098) and Prospect Island were created 1917-1924. Liberty Island and Cache-Haas were reclaimed in the late 1930's. All lands in the Yolo Bypass are subject to flowage easements purchased by the State.

Conservation easements have been purchased on several of the duck clubs as part of the Central Valley Habitat Joint Venture. Natural Resources Conservation Service purchased a conservation easement on 563 acres of Liberty Farms in 1999. The City of Davis has acquired fee title and easements on lands along Putah Creek. Bureau of Reclamation bought Prospect Island in 1997. Trust for Public Lands purchased Liberty Island in 1999 with a CALFED grant.

DESCRIPTION OF SITE: The study area is flat land that has been farmed for many years. The Yolo Bypass was historically a low area that received water from Putah Creek. In 1917 the Yolo Bypass was approved as part of the Sacramento River Flood Control Project. Flood control levees were built on the east and west sides of the Bypass and flowage easements were purchased from the landowners in the Bypass. The Bypass is designed to carry 500,000 cfs. The easements allow agricultural use, but no permanent structures. The site slopes from the north to the south, with the highest elevations of 30 feet (near the Yolo County Park) and the lowest elevations of -5 feet. The levees are federal project levees in good repair. The levees are designed to be 4 to 6 feet above floodwater elevation. Levees *within* the Bypass are restricted in height to allow floodwaters to pass over the levees if needed.

SOILS: Soils in the study area are "well-drained to poorly drained soils on alluvial fans, basin rims and terrace and in basins". In the northern Yolo Bypass, most of the soils are Capay-Sacramento (moderately well drained to poorly drained, nearly level silty clay loams to clays) and in the southern Yolo Bypass, most of the soils are Egbert-Ryde (nearly level, poorly drained silty clay loams and clay loams that are high in organic matter).

In Solano County, Prospect Island, Lower Egbert Tract, Moore Tract and Liberty Farms are designated Prime agricultural land; Liberty Island is Farmland of Statewide Importance. In Yolo County, most of the Yolo Bypass is designated Unique Farmland, Grazing Land and Other; the northwestern portion is designated Prime agricultural land.

WATER SOURCES: Water sources are Delta channels and the Toe Drain.

GENERAL PLAN DESIGNATION: All lands in the study area are designated for agricultural use in the County General Plans.

WILLIAMSON ACT: Approximately 95% of the Yolo County lands in the study area and all of the lands in Solano County in the study area are under Williamson Act Contracts. If lands were acquired by a federal agency, Williamson Act contracts would be immediately terminated.

EXISTING AGRICULTURE: Because of the restrictions of the flowage easements on lands in the Yolo Bypass, agricultural uses and crops are limited to field crops such as safflower, corn, tomatoes, sugar beets, and others, and pasture. Permanent crops such as orchards or vineyards are not allowed in the Yolo Bypass. The EA states that the estimated annual value of crop production within the study area is \$16.9 million, less that 1% of the combined total value of agricultural production of Solano and Yolo Counties.

EXISTING PROPERTY TAXES: The EA estimates that the land in the Solano County portion generates about \$81,000 per year in property tax and \$48,000 in Williamson Act subventions. The funds are divided between the County and special districts. The Yolo County portion of the study area generates an estimated \$174,200 in property tax revenue and \$113,800 in Williamson Act subvention payments. The funds are divided between the County and special districts.

EXISTING RECREATION USES: There are several privately owned duck clubs in the preferred alternative, in the Yolo County portion of the Bypass. These duck clubs, several of which are under conservation easements, total approximately 4,100 acres. The Yolo County Park has improvements that serve several recreational activities. The waterways within the proposed Refuge are used for fishing, cruising, swimming, water-skiing, anchoring out, and hunting. Several floating hunting blinds are located in Prospect Slough during hunting season.

The Yolo Bypass Wildlife Area to the north of the proposed refuge has auto and pedestrian trails, educational activities, and seasonal hunting. There are two marinas adjacent to the proposed refuge boundary: Hidden Harbor at the tip of Ryer Island, and Snug Harbor just east of Prospect Island. An upland hunting club is located on Hastings Tract just east of the proposed refuge.

EXISTING WILDLIFE HABITAT VALUES: The agricultural lands are used seasonally by migratory waterfowl and other birds, and Swainsons hawks. In high water flow years, the area is used by many species of fish. There are several thousand acres of existing water-covered habitat in the study area.

EXISTING ECONOMIC BENEFITS: Agricultural production in the study area accounts for *direct* economic effects of 224 full and part-time jobs and \$10.4 million in annual personal income. The *indirect and induced* effects of farming account for 475 jobs and \$18.6 million in personal income in the region.

The EA estimates the duck clubs generate 23 jobs and \$609,000 in personal income. The duck clubs generate 41 jobs and \$1.2 million in total *direct, indirect and induced* effects.

HISTORY OF FLOODING: Congress approved The Yolo Bypass as part of the Sacramento Flood Control Project in 1917. The State built levees and acquired flowage easements on lands in the Bypass. Prospect Island was cut off from the Bypass when the Deepwater Ship Channel was constructed. The Flood Control Project included massive dredging of the lower Sacramento. The Bypass is designed to carry 500,000 cfs, about 4.5 times the capacity of the Sacramento River. NOTE: The land in the northwest corner of Alt 5, and Moore Tract and Liberty Farms are not in the Yolo Bypass.

CONFORMANCE WITH CALFED: The EA states the establishment of the refuge would contribute substantially to CALFED's ecosystem restoration program (see chart on page 9).

## **ISSUES:**

### **AGRICULTURE:**

Cumulative Impacts to Agricultural Lands in the Solano and Yolo Counties: The EA states Alt 5 would result in the loss of 28,626 acres of farmland, including 5,937 acres of prime agricultural lands. About 6,000 acres of prime agricultural land in Yolo County would be incorporated into the Refuge. The EA states in Yolo County, 1.4% of the County's agricultural production value and 2.1% of the County's farmland would be displaced. In Solano County, 2.7% of total agricultural production and 2.5% of farmland would be displaced. For crops grown in the study area, the loss would be 7.9% and 2.7% loss of agricultural production values for Solano and Yolo Counties. The loss of Prime farmland would be 3.6% of Solano County's Prime farmland. Yolo County would lose 0.2% of all Prime farmland. The EA states the displacement of 28,626 acres of farmland would represent "substantial losses of agricultural resources and productivity".

Within the Primary Zone, the loss of 28,626 acres of farmland would be 7.5% of the land in agriculture in the Primary Zone in 1993.

Seepage: The EA states the only location where seepage may be an issue is adjacent to the northern end of the western levee on Egbert Tract where there is no channel between Egbert and lands to the west and those lands are at sea level. Suggested mitigation measures include building berm adjacent to the levee, or providing assistance with increased pumping.

The EA does not address seepage issues associated with Prospect Island restoration; landowners on Ryer Island have contested findings that the restoration of Prospect Island would not cause seepage on Ryer Island.

Weeds/Unwanted, Possibly Protected Plants "Migrating" to Agricultural Lands: There would be significant areas of agricultural land adjacent to refuge lands. There is no discussion in the EA of the need for buffers within the refuge boundary. The EA states that noxious weeds "officially listed as requiring eradication" would be controlled with appropriate management methods.

Protected Species "Migrating" to Agricultural Lands: There would be significant areas of agricultural land adjacent to refuge lands. There is no discussion in the EA of the need for buffers within the refuge boundary. The EA states landowners may apply for Safe Harbor program by requested the Service to inventory habitat values on private lands.

Restrictions to Common, Accepted Agricultural Practices: There would be significant areas of agricultural land within and adjacent to refuge lands. There is no discussion in the EA of the need for buffers within the refuge boundary.

Impacts of New Aquatic Habitat on Nearby Water Diversions: The Barker Slough Pumping Plant which pumps up to 228 cfs of water into the North Bay Aqueduct is located at the western end of Lindsey Slough near the restoration areas. In addition, there are agricultural intakes in the vicinity of the proposed refuge. The EA states the refuge would require no screens and if a screen is needed, the Service would help find funds and the conditions of the Pumping Plant permit could be modified.

Water Quality: The EA states that opening large areas to tidal action could impact water quality but the change would be minimal because "levees on Liberty Island, Little Holland Tract, the Cache Slough mitigation areas, and Prospect Island have already been breached". The EA states the size of the effect has not been determined, but existing changes have not caused noticeable impacts on beneficial uses of water.

Water Use: The EA states that no more water than is currently used in the study area will be used by the proposed refuge. The EA does not include any specific information about the current uses, or proposed water needs.

### **WILDLIFE HABITAT:**

Ag Land versus Open Water and Tule Marsh: The project will replace seasonal agricultural habitat that is a rich source of food for migratory waterfowl with open water and tule marsh habitat for fish. There is no discussion of values and trade-offs between the existing and proposed habitats.

Duck Clubs: Alt 5 includes many private duck clubs (approximately 4,000 acres), many of which already have conservation easements and provide managed, seasonal wetland habitat. The EA does not address future management of the duck clubs, or discuss if the Service would acquire the duck clubs or simply include them within the refuge boundary to promote mutually beneficial land management practices.

Coordination with Local Habitat Plans: Yolo and Solano Counties are preparing Habitat Conservation Plans. The EA does not address coordination opportunities.

Links to Existing Habitat: The proposed refuge includes many links including links to the existing 3,600 acre Yolo Bypass Wildlife Area; City of Davis open space lands along Putah Creek; to vernal pools on the Davis Communications site; and to the Cache Slough Mitigation.

Use of Lands in Public Ownership or Subject to Flooding: Alt 5 is mostly within the Yolo Bypass, with the exception of lands in the northwest corner of the proposed refuge and Moore Tract and Liberty Farms west of Liberty Island. Some publicly owned land is proposed for incorporation into the refuge including Prospect Island, Yolo County Park, Davis Communication Site, the Cache Creek Mitigation Site, City of Davis lands along Putah Creek, and Port of Sacramento lands. Liberty Island will be transferred to the Service when a boundary is approved.



**CALFED ERPP:** The location and type of habitat proposed are consistent with the draft CALFED Ecosystem Restoration Program Plan (ERPP). However, the refuge exceeds the acreage of restored habitat included in the ERPP for the North Delta for some types of habitat. The CALFED "North Delta" includes the Stone Lakes National Wildlife Refuge and extends to the western edge of the Delta.

	<b>CALFED ERPP/North Delta (June 1999 RDEIR/EIS)</b>	<b>Preferred Alternative 5</b>
Tidal Perennial Aquatic	1,500 ac <i>Prospect: 500 ac</i> <i>Little Holland Tract and</i> <i>Liberty Island: 1,000 ac</i>	4,500 ac shallow open water 1,000 ac deep open water
Tidal Fresh Emergent Wetland	30-45,000 ac (Entire Delta)	3,500 ac tule marsh
Nontidal Fresh Emergent Wetland	3,000 ac <i>Yolo Bypass: 1,000 ac</i>	None listed
Nontidal Perennial Aquatic-Shallow	1,000 ac	None listed
Seasonal Wetland	Restore: 4,000 ac Improve: 1,000 ac <i>Yolo Bypass: 1,000 ac</i> <i>Yolo Basin Wildlife Area:</i> <i>2,000 ac</i>	9,500 ac
Riparian	10-20 linear miles, plus 500 acres <i>Steamboat Slough: 5-10 linear</i> <i>miles</i>	1,500 ac of oak woodland and riparian shrub/scrub forest
Perennial Grassland	1,000 ac	2,000 ac
Wildlife-Friendly Agriculture	40-75,000 ac (Entire Delta)	6,000 ac

## **RECREATION:**

**Types of Proposed Recreation:** Alt 5 would provide opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation. All public entry and use of refuge lands are at the discretion of the refuge manager. The EA does not state when a plan for the refuge will be prepared, or when funds would be available to construct public facilities. The EA does estimate 300,000 visitor days to the refuge (p. A-8).

**Existing Recreation that Could Continue:** Current recreational opportunities are identified as fishing on navigable waterways, wildlife viewing from county roads, and waterfowl hunting on private duck clubs. Boating access along navigable waterways such as the Yolo Basin toe drain, Shag Slough, Prospect Slough, Miner Slough, and Liberty Cut are under the jurisdiction of the State Lands Commission. All existing public boating uses would continue on navigable

waterways. The EA does not indicate if Holland Tract would be open to navigation.. The EA does not include existing hunting from waterways as an existing recreation use.

Areas Where Boating May be Restricted: The EA states restored tidal wetlands within Delta islands such as Prospect Island, Little Holland Tract, and Liberty Island, would be controlled by the Service to ensure compatibility of recreation uses with the purposes of the refuge. Note: Little Holland Tract has been flooded since 1983.

Access to the Refuge: There is no information about how access would be provided to the refuge, or where any facilities might be located. There is no analysis of traffic in the EA; however, the EA estimates either 207,220 (p. 4-39) or 300,000 (p. A-8) visitor days to the refuge.

### **OTHER ISSUES:**

Mosquito Control Component: The EA states that the mosquito abatement districts will require that created wetlands be designed, constructed and managed to minimize impacts from mosquitoes. The Service proposes to sign agreements with the two Districts.

Impacts to Levees: There is very little information about possible impacts to levees, such as: increased levee erosion/impacts; water pressure on levees; unauthorized recreation uses on nearby privately owned lands; increased flood pressures on downstream levees; or impacts to levee inspections and/or maintenance. In other areas of the Delta, creation of large open water bodies has resulted in increased erosion to nearby levees due to wave action associated with the large area of fetch (Bethel Island affected by waves across Franks Tract). This situation could occur on portions of Hastings Tract, Egbert Tract, and lower Ryer Island.

Fiscal Impacts to Special Districts: The preferred alternative includes acquisition of approximately half of RD 2098 (Liberty Farms and Moore Tract); the EA states that Special Service Districts will not incur increased costs of levee maintenance, water delivery, etc., as a result of Service land acquisitions. The Service will through sign cooperative agreements

Fiscal Impact to Counties: The EA states Alt 5 would result in a loss of taxes and subvention payments which would be partially offset by federal revenue-sharing payments resulting in a net revenue loss of \$16,000 to Solano County and special districts and net revenue loss of \$26,800 to Yolo County and special districts

Regional Economic Impacts: The EA estimates a loss of 144 agriculture-sector jobs and \$7.4 million in annual farm income and a total of 297 farm-dependent jobs and \$12.2 million in personal income in the two counties. Annual refuge recreation use of 207,220 visitor days (p. 4-39) would directly generate 38 jobs and \$768,000 in personal income and result in a total of 64 jobs and \$1.6 million. Refuge management would generate 57 direct full and part-time jobs and \$3 million in personal income; total regional economic effects would be 89 jobs and \$4.1 million in personal income. Under Alt 5, farm-related jobs would be partially compensated by jobs in the

refuge recreation and management. Local businesses serving the farming sector would be affected. The net impact would be a decrease of 49 full and part-time jobs and loss of annual income of \$3.6 million. The total regional economic effects would be losses of 144 jobs and \$6.5 million in personal income. This loss in jobs and personal income represents less than 0.1% of all jobs and personal income in the two counties.

Impacts to the Capacity of the Yolo Bypass: The EA states the proposed refuge will not diminish the capacity of the Yolo Bypass. Preliminary calculations indicate that the proposed restoration project would diminish capacity and raise flood elevations at the north end of the Bypass. Possible mitigation measures listed in the EA include: raise the existing levees; strengthen the existing levees to accommodate decreased freeboard; build a setback levee around Liberty Farms and Moore Tract to enlarge the Bypass; remove or lower existing interior levees perpendicular to flow direction (Liberty and Egbert); deepen or widen the Toe Drain or excavate new channels parallel to the flow direction to increase the cross-sectional area of flow; or graze, burn, mow, prune, or thin vegetation to decrease height and density.

Local Control/Oversight: The Delta Protection Commission suggested in July 1999 that local control should be incorporated into the refuge, with participation from cities, counties, reclamation districts and neighboring landowners. The EA states a Comprehensive Conservation Plan must be prepared for each refuge and that the plan will be developed with substantial public involvement and will be subject to environmental analysis and documentation. The EA does not state when the Plan would be prepared, or who would be invited to participate in the planning process. The EA does not indicate if there will be any public involvement in refuge management in the interim period, prior to preparation of the Plan.

## **Excerpts from the Commission's Land Use and Resource Management Plan**

*(Note: Policies apply to Local Governments;  
Recommendations apply to Other Governmental Entities)*

### **Environment Policies and Recommendations:**

P-1: The priority land use of areas of prime soil shall be agriculture. If commercial agriculture is no longer feasible due to subsidence or lack of adequate water supply or water quality, land uses which protect other beneficial use of Delta resources and which would not adversely affect agriculture on surrounding lands, or viability or cost of levee maintenance may be permitted.

P-3: Lands managed primarily for wildlife habitat shall be managed to provide several inter-related habitats. Deltawide habitat needs should be addressed in development of any wildlife habitat plan. Appropriate programs...should ensure full participation by local government and property owner representatives.

R-1: Seasonal flooding should be carried out in a manner so as to minimize mosquito production...

R-2: Wildlife habitat on the islands should be of adequate size and configuration to provide significant wildlife habitat for birds, small mammals, and other Delta wildlife.

R-4: Feasible steps to protect and enhance aquatic habitat should be implemented as may be determined by resource agencies consistent with balancing other beneficial use of Delta resources.

R-5: Public-owned land should incorporate...suitable and appropriate wildlife protection, restoration and enhancement as part of a Deltawide plan for habitat management.

R-6: Management of suitable agricultural lands to maximize habitat values for migratory birds and other wildlife should be encouraged. Appropriate incentives, such as conservation easements, should be provided by non-profits or other entities to protect this seasonal habitat through donation or through purchase.

R-7: Lands currently managed for wildlife habitat, such as private duck clubs or publicly owned wildlife areas, should be preserved and protected...

### **Utilities and Infrastructure Recommendation:**

R-7: Natural gas production will continue to be an important use of Delta resources. Structures needed for gas extraction should be consolidated to minimize displacement of agriculture and wildlife habitat...

## **Land Use Policies and Recommendations:**

P-2: Local government General Plans and zoning codes shall continue to strongly promote agriculture as the primary land use in the Primary Zone...

P-3: New...recreational...development shall ensure that appropriate buffer areas are provided by those proposing new development to prevent conflicts between any proposed use and existing agricultural use...

R-1: A program by non-profit groups or other appropriate entities should be developed to promote acquisition of wildlife and agricultural conservation easements on private lands with the goal of protecting agriculture and wildlife habitat in the Delta.

R-2: Public agencies and non-profit groups have or propose to purchase thousands of acres of agricultural lands to restore to wildlife habitat. The amount, type and location of land identified to be enhanced for wildlife habitat should be studied by wildlife experts to determine goals for future acquisition and restoration. Lands acquired for wildlife habitat should also be evaluated for recreation, access, research and other needed uses in the Delta. Habitat restoration projects should not adversely impact surrounding agricultural practices. Public-private partnerships in management of public lands should be encouraged. Public agencies shall provide funds to replace lost tax base when land is removed from private ownership.

R-3: Multiple use of agricultural lands for commercial agriculture, wildlife habitat, and if appropriate, recreational use, should be supported, and funding to offset management costs pursued from all possible sources. Public agencies shall provide funds to replace lost tax base when land is removed from private ownership.

## **Agriculture Policies:**

P-1: Commercial agriculture in the Delta shall be supported and encouraged as a key element in the State's economy and in providing the food supply needed to sustain the increasing population of the State, the Nation, and the world.

P-4: Local governments shall support long-term viability of commercial agriculture in the Delta because of its economic and environmental importance to the State and local communities.

P-7: Encourage acquisition of agricultural conservation easements...through public or private funds obtained to protect agricultural and open space values, and habitat value that is associated with agricultural operations...Encourage use of environmental mitigation in agricultural areas only when it is consistent and compatible with ongoing agricultural operations and when developed in appropriate locations designated on a ...Deltawide habitat management plan.

P-8: Encourage management of agricultural lands which maximize wildlife habitat seasonally and year-round through techniques such as sequential flooding in fall and winter, leaving crop residue, creation of mosaic of small grains and flooded areas, controlling predators, controlling poaching, controlling public access, and others.

**Water:**

P-1: Salinity levels in Delta waters shall ensure full agricultural use of Delta agricultural lands, provide habitat for aquatic life, and meet requirements for drinking water and industrial uses.

P-2: Design, construction, and management of any flooding program to provide seasonal wildlife habitat on agricultural lands shall incorporate "best management practices" to minimize mosquito breeding opportunities and shall be coordinated with the local vector control district...

R-2: Delta water rights should be respected and protected.

R-3: Programs to enhance the natural values of the State's aquatic habitats and water quality will benefit the Delta and should be supported.

R-5: Water for flooding to provide seasonal and year-round wildlife habitat should be provided as part of State and federal programs to provide water for wildlife habitat.

R-8: Water quality at Delta drinking water intakes should be maintained or enhanced.

**Recreation and Access Policies and Recommendations:**

P-6: Local governments shall support multiple uses of Delta agricultural lands, such as seasonal use for hunting, or improved parking and access sites.

P-9: Local governments shall encourage new recreation facilities that take advantage of the Delta's unique characteristics.

R-6: State and federal projects in the Primary...Zone should include appropriate recreation and/or public access components to the extent consistent with project purposes and with available funding. State and federal agencies should consider private or user groups improvements on publicly owned lands to provide facilities...

**Levees Policies and Recommendations:**

P-1: Delta levees shall be maintained to protect human life, to provide flood protection, to protect private and public property... to protect riparian and upland habitat...to protect water quality in the State and federal water projects, and to protect recreational use of the Delta area...

#####

**Excerpts from September 15, 1999 from Delta Protection Commission to CALFED re:  
Revised Draft Environmental Impact Statement/Environmental Impact Report**

The Commission agreed with the DEIR list of mitigation measures to minimize adverse impacts to agricultural land in the Delta including:

- Restore existing, degraded habitat first.
- Develop habitat on public land first.
- Absent public lands, acquire and restore lands acquired from willing sellers where at least part of the reason to sell is economic hardship (land that floods frequently or levees that are too expensive to maintain).
- For lands with waterside habitat, seek land on islands where the ratio of levee miles to acres farmed is high.
- Obtain easements on farmland that would allow for minor changes in agricultural practices thus increasing the value of crops to wildlife.
- Floodplain restoration efforts would include provisions for continued agricultural practices on an annual basis.
- Conversion would occur over an extended time period; the conversion process would include extensive community, landowner and stakeholder involvement.

The Commission also suggested:

- Develop and implement individual management plans for private agricultural properties and develop costs to offset costs of voluntary implementation of such plans.
- Develop and implement individual management plans for privately owned lands managed for wildlife habitat such as duck clubs and upland hunting clubs.
- Develop programs to address stressors to avoid duplication of existing regulatory programs and which address the needs of existing land uses.

#####

## DELTA PROTECTION COMMISSION

14215 RIVER ROAD  
P.O. BOX 530  
WALNUT GROVE, CA 95690  
PHONE: (916) 776-2290  
FAX: (916) 776-2293



August 11, 1998

U.S. Fish and Wildlife Service  
2233 Watt Avenue, Suite 375  
Sacramento, CA 95825

Attention: John Castellano, Wildlife Biologist

Subject: Proposed North Delta National Wildlife Refuge

Dear Mr. Castellano:

I attended the Open House regarding the study for the proposed North Delta National Wildlife Refuge (refuge) and am submitting the following comments for analysis in the on-going planning process. The Delta Protection Commission itself has not had the opportunity to review the proposed project, so these are staff comments only. They are however based on the Commission's adopted Plan and law, and previously adopted policy positions. The Commission's Plan and law apply to local government actions only, so these are advisory comments only.

First, I want to acknowledge and thank you for your outreach to the local community. I understand you made presentations to the Board of Supervisors of Yolo and Solano Counties in addition to providing staff resources at the open house style meeting on July 28. I recommend this outreach be continued by meeting with Reclamation Districts, other special districts, and individual landowners that would be affected by creation of a new refuge.

On behalf of the Commission, I would like to extend an invitation for you to brief the Delta Protection Commission on this project; the Commission meets every other month (in the odd months) in the Jean Harvie Community Center in the evening. A briefing to the Commission would allow the Commissioners and members of the public an opportunity to understand the proposed project and to give you their comments.

Relationship of the Proposed Refuge to CALFED:

U.S. Fish and Wildlife Service is one of the signatories to and partners in CALFED. The CALFED planning process is underway, but no final project has yet been determined. While not described as a CALFED ecosystem restoration project, the Service has applied for and received funds from CALFED for acquisition of Liberty Island, and much of the project is specifically described in the Ecosystem Restoration Program Plan (see Visions for Ecological Unites: North Delta Ecological Unit pp 26-27, and Habitats pp: 45-56, March 1998).



In particular, the Delta Protection Commission reviewed and submitted comments on the Ecosystem Restoration Program Plan (ERPP) which is one of the common elements of the CALFED program. The Delta Protection Commission commented that the ERP should be revised to focus enhancement and restoration efforts as follows:

Restoration and/or enhancement of lands currently in public and/or nonprofit ownership and designated for restoration.

Acquisition and/or enhancement of currently flooded lands to create and/or enhance emergent habitat.

Development and implementation of management plans for upland areas already in public or nonprofit ownership.

Development and implementation of individual management plans for private agricultural properties and development of funds to offset costs of voluntary implementation of such plans (plans could include flooding programs, enhanced levees and pumps to enhance flooding and drainage, recommended crop rotation cycles, size and location of permanent brood ponds, etc)

Development and implementation of individual management plans for privately-owned lands managed for wildlife habitat, such as duck clubs and upland hunting clubs, and development of funds to offset costs of voluntary implementation of such plans.

Control of stressors should be revised to avoid duplication with existing regulatory program, such as existing dredging "windows", and the programs that are developed should respect the needs of existing land uses, such as water-oriented recreation. Where funds are needed to carry out specific programs, those funds should be made available to private landowners to implement programs.

Protection, enhancement, and restoration of in-channel islands and waterside berms.

As you can see, the Commission's comments focus on keeping as much land in the Primary Zone of the Delta in private ownership, and working with the habitat values associated with agriculture. We suggest that your proposed project should be modified to be in conformance with these comments in order to conform to the CALFED ERPP. In addition, the proposed refuge environmental document should evaluate how any alternative would meet the acreage goals for various types of habitat restoration which have been included in the ERPP.

### Flood Issues:

The Yolo Bypass lands have been designated, and flowage easements obtained, for flood protection for Sacramento and the Delta. My understanding is that in the development of the agreements for the newly created Yolo Bypass Wetlands Project, there were some negotiated restrictions on the location, size and type of vegetation that could be grown in the Bypass on the flood easement lands. Please include a description of any restrictions that would apply to lands in the proposed refuge that are in the Yolo Bypass.

There have been several references to the "bottleneck" at the south end of the Bypass and Liberty being the "cork" in the bottleneck. Please include current hydrologic analysis of the Bypass and its flood control values, and how those would change with various alternative restoration or management proposals.

There are several flood proposals under consideration in the Sacramento region, i.e. the SAFCA approved "Matsui" proposal which would create added flood control benefits to the City of Sacramento by enlarging the Sacramento Weir and sending more water, earlier, into the Bypass. That proposal also includes strengthening the levees around and near the Bypass. The consistency of the proposed refuge with pending flood control proposals should be analyzed.

### Conversion of Agricultural Lands to Wildlife Habitat:

The Refuge study area includes approximately 50,000 acres of land, most of which are currently zoned and in active agricultural use. There are several duck clubs in the Yolo Bypass, Little Holland Tract is currently flooded and slated for acquisition by the Corps of Engineers, and Prospect Island is currently flooded, but slated for levee repair soon. The Delta Protection Commission's adopted Plan states that the most appropriate use for land in the Primary Zone of the Delta is agriculture, however if agriculture is no longer feasible, land should be converted to wildlife habitat. The environmental document should include an analysis of the viability of the various tracts of land for agriculture, and explain why they are no longer feasible for agricultural use and thus suitable for restoration to wildlife habitat.

The Delta Protection Commission's Plan includes policies that ensure that any buffers needed will be provided on the new project; any buffers needed between the refuge and existing agricultural lands should be designed as part of the refuge.

Valuable analysis regarding conversions of agricultural lands to wildlife habitat was included in the environmental document for the Stone Lakes Wildlife Refuge; similar analysis should be included in the environmental document for the North Delta refuge.

Conversion of agricultural lands to wildlife habitat has third party impacts to the agricultural community and the surrounding environs. The environmental document should address what the regional economic impacts will be from the conversion of agriculture to habitat.

### Possible Impacts to Local Government Revenues:

When lands are purchased by federal agencies, property taxes are no longer paid. Other fees are paid to local government to offset the loss of those fees. The environmental document should describe the current taxes paid to local government and special districts, describe the amount of acreage which would no longer generate those taxes and fees, and describe the type and amount of in lieu payments which would be made by the U.S. Fish and Wildlife Service.

### Recreation:

The project description should include specific information about the location and type of recreation which will be provided as part of the refuge. Using Yolo Bypass, Cosumnes Preserve and Stone Lakes as examples, this refuge should consider including: hunting, fishing, hiking, bicycling, auto tours, wildlife observation, small boat launching facilities, picnic facilities, and a visitor center. Due to the isolation of the area from visitor serving facilities, complete facilities including phone, restrooms, and small concession facility should be considered. In addition, the refuge may want to provide camping or rustic lodging facilities, either through the Service, through a nonprofit group, or through a private concessionaire. Issues of circulation and access should be addressed.

### Management:

The Service should explain how the refuge would be managed--as part of another facility with shared staff and facilities, or as an independent unit. The Service should be prepared to fully and adequately fund needed staff to oversee management and oversight of the refuge. In addition, the Service must ensure that adequate funds are available to maintain any levees that are to remain in place to provide local or regional flood control protection.

Thank you for the opportunity to submit comments on the proposal to develop a North Delta Wildlife Refuge. Please call if you have any question about these comments.

Sincerely,



Margit Aramburu  
Executive Director

cc: Chairman Patrick N. McCarty  
Lester Snow, CALFED

## DELTA PROTECTION COMMISSION

14215 RIVER ROAD  
P.O. BOX 530  
WALNUT GROVE, CA 95690  
PHONE: (916) 776-2290  
FAX: (916) 776-2293



February 23, 1999

U.S. Fish and Wildlife Service  
2233 Watt Avenue, Suite 375  
Sacramento, CA 95825

Attention: John Castellano, Wildlife Biologist

Subject: Proposed North Delta National Wildlife Refuge

Dear Mr. Castellano:

Thank you very much to you and your associates with the Service for briefing the Commission on the proposed North Delta National Wildlife Refuge at the Commission's January 28, 1999 meeting. You can understand that this is an important regional issue based on the level of interest expressed by the Commission.

I am writing to you to summarize the comments from the Commission as presented at the meeting. These comments should be considered along with the staff comments on the proposed refuge submitted to you in August, 1998.

First, there were a number of issues regarding potential and planned recreational uses in the Refuge. There was a great interest that existing uses, such as hunting be allowed to continue. There was also interest that new uses be allowed to follow reintroduction of water to current land areas--boating, and that acquisition of private lands would be followed by a program allowing public use. The type, nature and location of proposed public recreational uses should be described in the proposed environmental document.

Second, there were a number of comments about impacts to agriculture in the Delta region. These comments ranged from concern about regional economic impacts due to the possible conversion of many thousands of acres of land from agriculture to refuge, local fiscal impacts associated with loss of property taxes and associated sales taxes, and possible impacts to remaining, nearby agricultural lands. Possible impacts to nearby lands include seepage impacts, limits to on-going agricultural activities, and possible new requirements to screen intakes as a

result of possible impacts to threatened and/or endangered aquatic species. You explained that the environmental document will include a special economic impact analysis currently under preparation by Jones and Stokes; the analysis should address issues raised by Delta Protection Commission members.

There were additional comments regarding wildlife habitat and the coordination of this wildlife habitat enhancement program with other programs such as local habitat conservation planning in Yolo County, local government mitigation requirements, and larger regional programs such as CALFED. The Refuge's relationship to these other programs should be described in the environmental document.

I look forward to reviewing the environmental document for the proposed refuge. Again, thank you for the opportunity to submit comments on the proposed Refuge. Please call if you have any question about these comments.

Sincerely,

A handwritten signature in dark ink, appearing to read "Margit Aramburu", followed by a horizontal line.

Margit Aramburu  
Executive Director

cc: Delta Protection Commission

JULY, 1999

Chairman McCarty said that at the BDAC meeting in San Diego there were many questions about the projects that have been selected for funding through the Category III program, the role the grants have in carrying out the goals of the CALFED program and how the projects are evaluated and selected for funding.

10. **Briefing on Proposed Environmental Document, Including Detailed Socio-Economic Analysis, of the Proposed U.S. Fish and Wildlife Service North Delta National Wildlife Refuge.**

Ms Aramburu noted that the Commission had received copies of two letters: one from the Yolo County Farm Bureau and one from George Bayse.

John Castellano, U.S. Fish and Wildlife Service, said the preparation of the environmental document has been delayed due to questions about the socio-economic impacts and hydrology. He said the environmental document is due to be released on September 1. He said the dates of the public hearings have been moved to Vacaville on September 15, and Woodland on September 22. He introduced Tom Harvey and Howard Stark from the Service.

Vice Chair Mello said he thought the socio-economic information in the four-page summary mailed to the Commission is incorrect; Mr. Castellano said that information would be changed. Vice Chair Mello also commented that flooded agricultural fields used for growing small grains have three times the foraging/nutrition value than tidal marsh for migratory waterfowl and raptors; Tom Harvey said agricultural land will provide high value habitat for wildlife and the Service will review appropriate land use parcel by parcel and would consider cooperative agreements and economic incentives for agricultural parcels. He said the Yolo Bypass lands are and will continue to be subject to flood flows.

Commissioner Sanders asked if a full environmental document or a FONSI will be prepared for the refuge project; Mr. Castellano said the draft environmental assessment will describe the four project alternatives and the no project alternative. Selection of a preferred alternative will wait until public input has been received. The review period for the environmental assessment will be as short as possible to allow a quick response and to meet timelines associated with the federal fiscal year.

Commissioner McGowan asked what is the role of local government in resolving conflicts between the local general plan goals and the goals of the refuge; Mr. Castellano said the Service staff is meeting with the Counties' planning staffs and with the Boards of Supervisors and listening to their concerns. He said the proposed project will attempt to minimize impacts to prime farmland by keeping land in private ownership and negotiating management agreements.

Mr. Harvey said not all the lands in the Bypass are prime farmlands, and added that the southern lands will be restored to tidal wetland habitat, but alternatives can be evaluated in the north. He said that rumors that all the lands in the study area would be acquired by the Service and retired from agriculture are wrong; lots of the land could be kept in agriculture. He said the Service has similar economic benefits to the local economy when buying equipment, maintaining ditches, applying herbicides, etc. He added that lands in the boundary of the refuge could be used to carry out the Yolo County Habitat Conservation Plan.

Commissioner McGowan asked if the environmental assessment will evaluate the impact on the Swainsons Hawk; Mr. Harvey said there will be impacts and there could be enhancements offsite to offset the impacts.

Commissioner McGowan asked how much lost revenue would be restored to local government; Howard Stark reviewed the process for determining fees to offset losses to local government and the need for Congress to authorize those payments. He said there would be a nominal fiscal impact and more details would be included in the environmental analysis.

Vice Chair Mello commented that impacts from creation of habitat areas could affect nearby lands, not just adjacent lands; Mr. Harvey said there are precedents to ensure that nearby landowners will not be adversely impacted by a refuge. An example is geese damaging crops; the farmers were compensated. He added that if fish screens need to be added to agricultural intakes due to the refuge, there are funding programs to help offset the costs of those screens. Mr. Harvey said the refuge could include internal buffers to address seepage and restrictions on the use of agricultural processes.

Commissioner Calone agreed with Vice Chair Mello's comments about direct and indirect impacts to neighboring landowners; Mr. Harvey said the study area for the refuge is the Yolo Bypass where flooding is a way of life. He said the refuge lands are surrounded by large bodies of water or upland areas.

Commissioner Yates asked about the analysis of the loss of agricultural land which is required by federal and state law; Mr. Castellano said that analysis is required only when land is being evaluated for acquisition and is not required at this stage of planning for a refuge.

Commissioner Curry asked about possibilities for recreation and boating in the new refuge; Mr. Harvey said all activities on the existing waterways would continue, and each property which becomes part of the refuge will be evaluated as it is acquired. He said a subsequent environmental document will be prepared for management of the refuge. Because a refuge is wildlife-oriented, hunting, fishing, and wildlife observation may be accommodated while water-skiing and jet skiing may not. He said there may need to be seasonal controls on access due to flooding as well as wildlife needs. Commissioner Curry said the Department

of Boating and Waterways is interested in non-powered boating access, such as the boating trails program.

Commissioner Calone expressed support for continued access for floating duck blinds; Mr. Harvey said access would be limited only if there is a proven conflict.

Mr. Castellano said the Service staff could return on September 23 to present the promised briefing on the socio-economic impacts.

Summarizing for the Commission, Chairman McCarty said:

- 1) The Service should ensure there is adequate time provided for review and comment on the draft environmental assessment.
- 2) The Commission is charged with oversight of agricultural, wildlife habitat and recreation and is concerned about impacts to agriculture in the Primary Zone of the Delta.
- 3) There should be local control incorporated into the refuge proposal, including cities, counties, reclamation districts, and neighboring landowners.
- 4) Wildlife habitat must be in balance with other uses.
- 5) Recreation should be included in the refuge design and management.

Chairman noted this is a very extensive project with the study area covering about 10% of the Primary Zone of the Delta.

#### **11. Briefing on the Prospect Island Restoration Project.**

Lena Hsia, Corps of Engineers, reviewed the several alternatives under consideration for restoration of Prospect Island to tidal wetland habitat. The Corps will be selecting Alternative 5. Ms Hsia also reviewed the funding for the project. She continued her presentation using overhead projections. She noted the levees have been repaired and the last water was pumped from the island interior on July 7. She said the construction will be in two phases with the construction to start in November. The interior levees will be graded to a gentle slope of 10 to 1.

Commissioner Calone asked if the levees will have to be strengthened to withstand wind driven waves; Ms Hsia said the Corps will maintain the levees for 50 years.

Commissioner Yates asked about the LESA evaluation of the project and noted that the evaluation had exceeded the threshold which requires evaluation; Katie Wadsworth, Department of Water Resources, said there are extenuating circumstances for this site which are described and addressed in the final environmental document. Commissioner Yates asked about the economics of the project; Ms Hsia said the cost of the project will offset the long-term costs of



FIGURE 2-1. BOUNDARY ALTERNATIVES, PROPOSED NORTH DELTA NATIONAL WILDLIFE REFUGE

